



## ***Program Executive Office for Simulation, Training & Instrumentation***

# **Over the Horizon: Impact of 3D Gaming, MMOG, and Mobile Technologies on Politics and Social Order**

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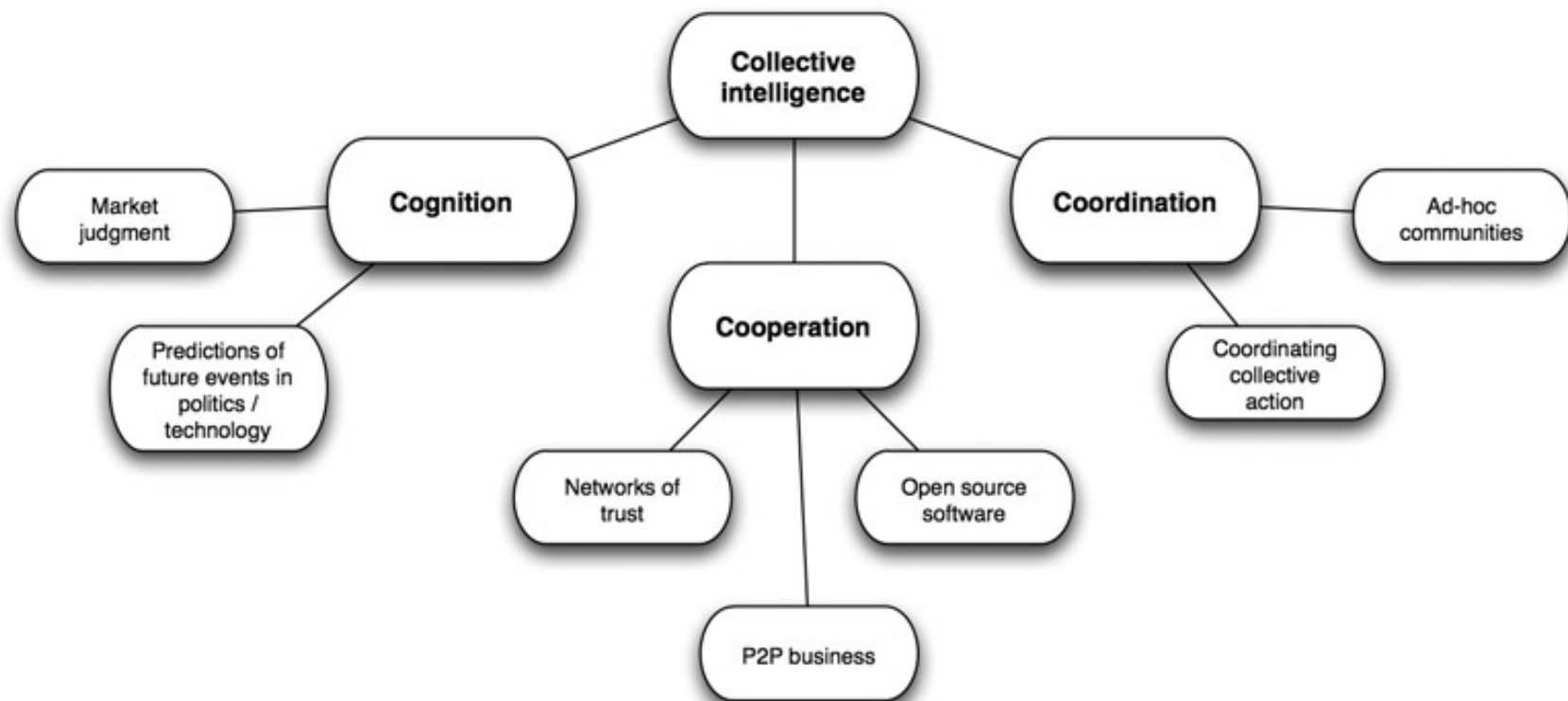




# Collective Intelligence

“An intelligence that emerges from the collaboration and competition of many individuals, an intelligence that seemingly has a mind of its own.”

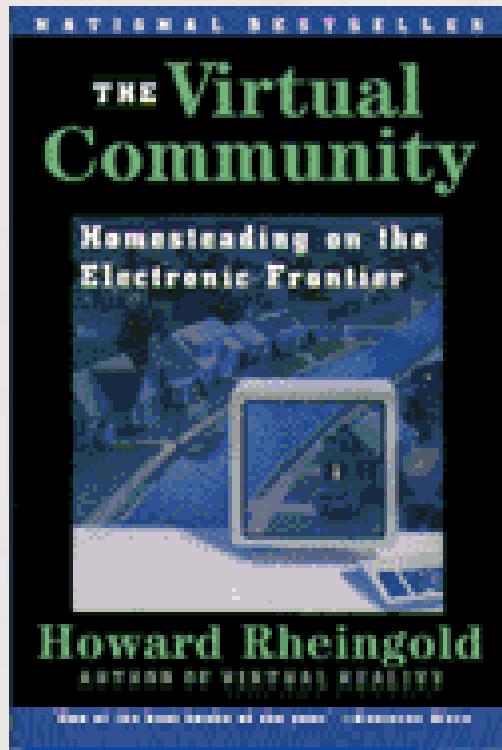
“The capacity of human communities to evolve towards higher order complexity and harmony, through such innovation mechanisms as differentiation and integration, competition and collaboration.”





# Digital Business Pundits

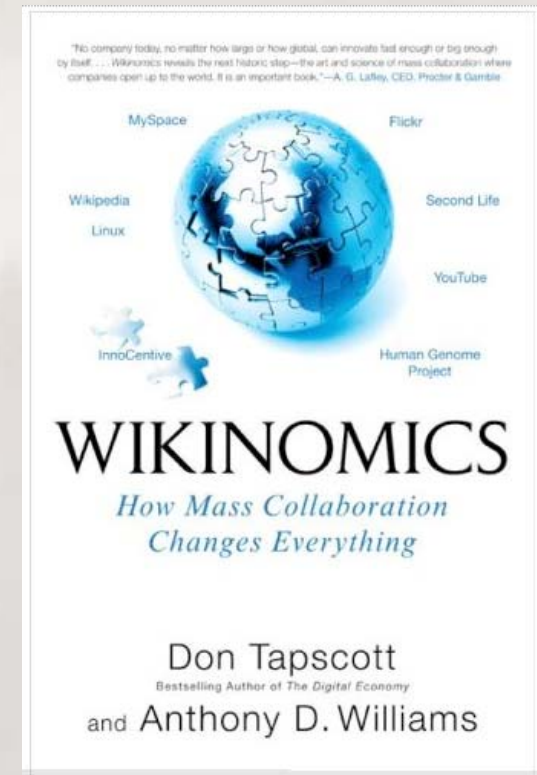
1993



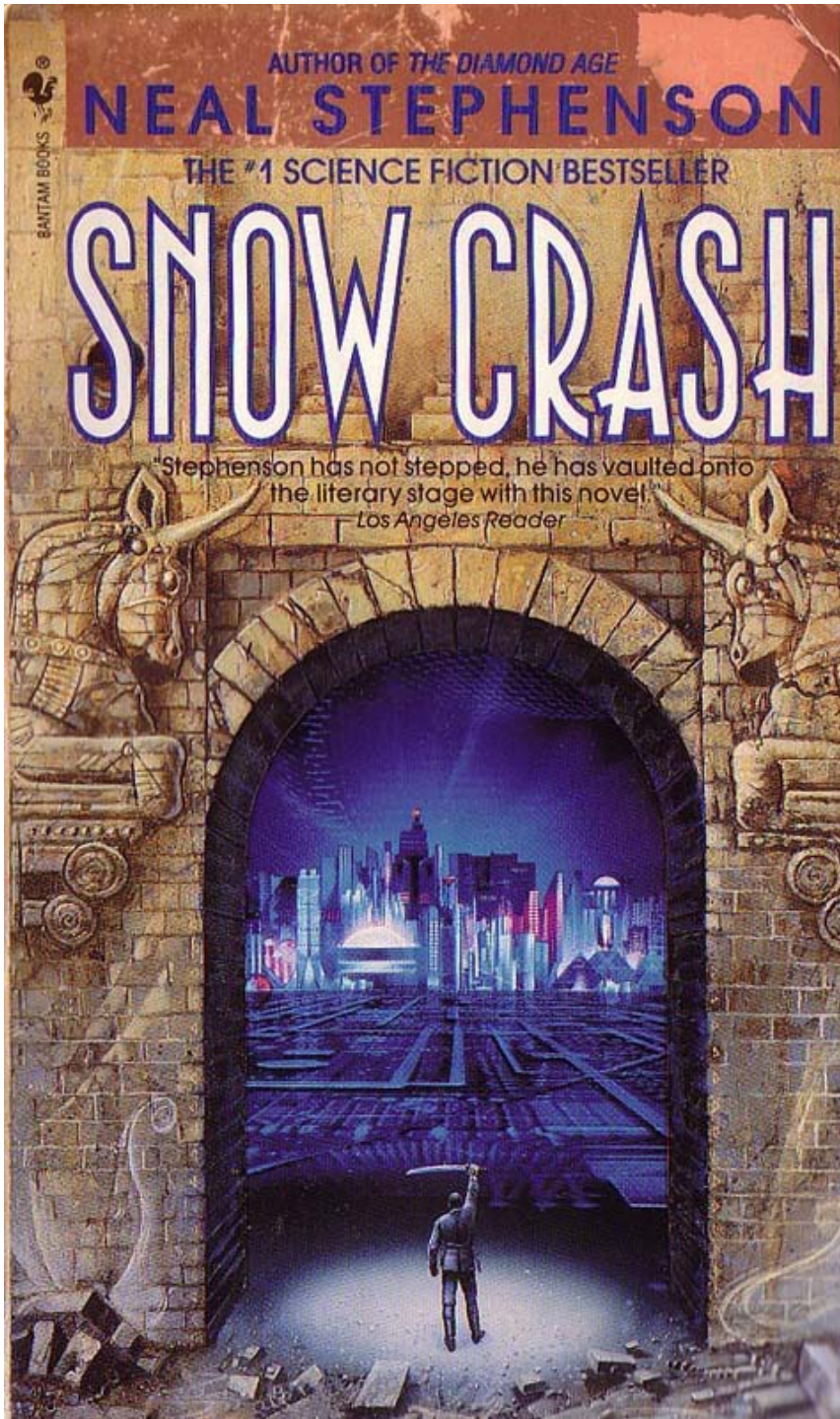
2004



2006







# Snow Crash: the seeds of a great idea

- Digital 3D World
- VR video, audio, motion interface
- Snow Crash virus can jump from digital to physical world
- Inspiration for Second Life

1992





# Evolution of Digital Worlds







# Bridging the Gap Between the Real and Virtual Worlds





# Virtual World Impact on Politics and Democracy







# Virtual World Anonymity



*"On the Internet, nobody knows you're a dog."*



There.com





# Ubiquitous Computing and Mixed Reality Games

- Desktop Computers
- Laptops
- Game Consoles
- Gameboy DS
- Pocket PC/Palm Pilot
- Cellphone
- Hybrid Devices



GAMECASTER'S CYBERCAM™ SERIES 2



# Closed vs. Open Societies

- Open
- Create
- Promote
- Advance

- Closed
- Adapt
- Wait





# MMOG Coordinated Attack

## Virtual World

Collect & Analyze  
Google Search

Data Mining

Target Wiki

3D XML Spec

Execute  
MMO

Social Network

IRC

Machinima

Promote  
Post MP3

Post 3D XML

Replay & Recreate

Virtual News Media

World Data

Physical Action

Training

PR &  
Recruit

Physical News Media

## Physical World



# Staying Ahead of the Competition

What if Democracies stuck with newspapers while only Extremists moved to television?



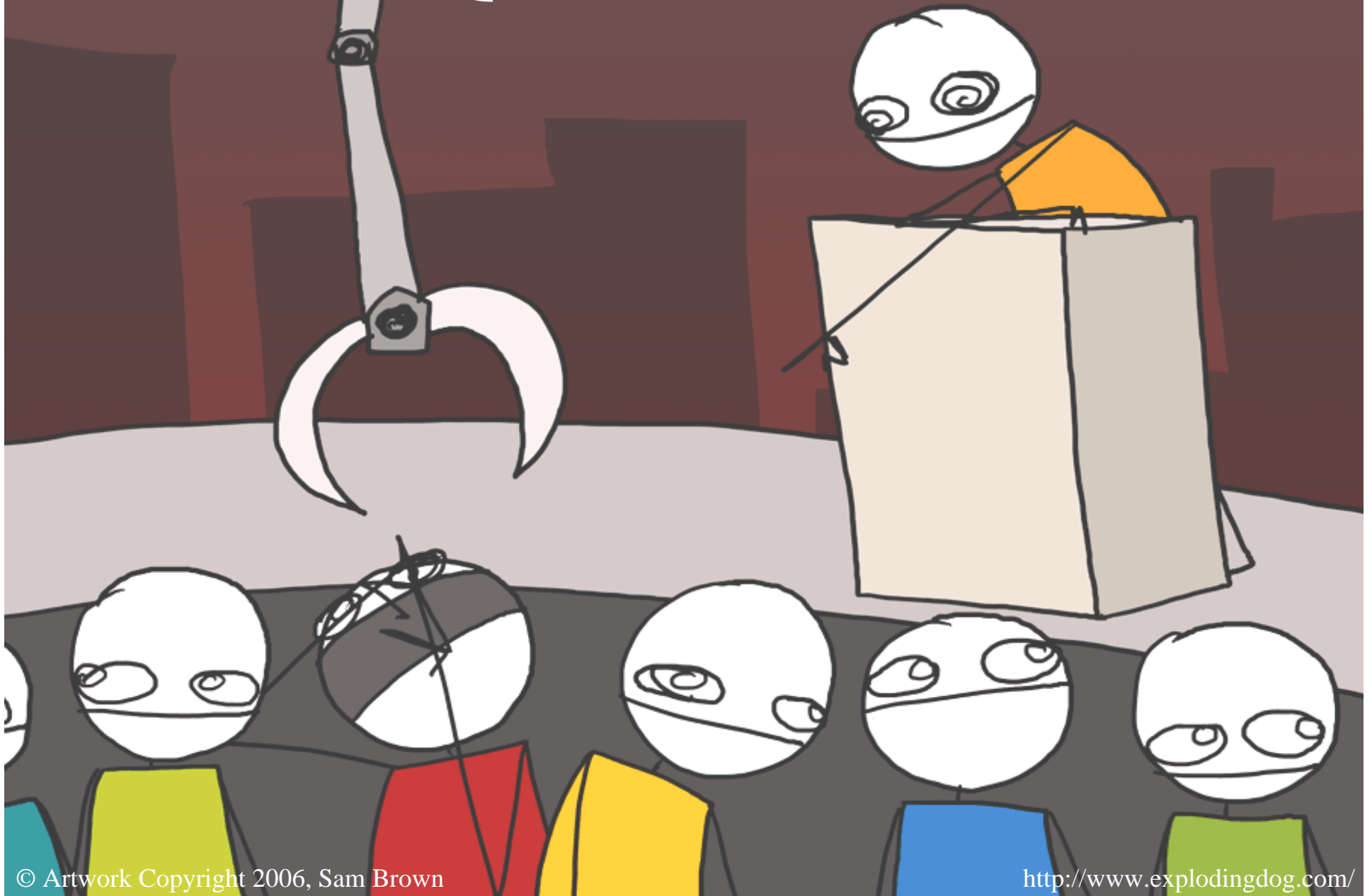
Ask the same question of 3D worlds.



Where do we go from here?



# Questions?







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